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In the claims:

1. (Currently Amended) A navigation system comprising:  
at least one non-geostationary satellite generating a plurality of signals having integrity information that is generated offboard said at least one satellite; and  
a navigation receiver determining a range of said at least one non-geostationary satellite, a position of said at least one satellite, and an accuracy of at least one of said range and said position in response to said plurality of signals.
2. (Original) A system as in claim 1 wherein said at least one satellite generates said plurality of signals comprising range and integrity information that is transmitted on a single frequency.
3. (Original) A system as in claim 1 wherein said at least one non-geostationary satellite generates said plurality of signals over an L5 frequency.
4. (Original) A system as in claim 1 wherein said at least one non-geostationary satellite generates said plurality of signals comprising a timing signal and a data signal.
5. (Original) A system as in claim 1 wherein said at least one non-geostationary satellite generates a first signal and a second signal, said second signal having said integrity information.
6. (Original) A system as in claim 5 wherein said at least one non-geostationary satellite generates said first signal comprising timing information and said second signal comprising timing and integrity information.
7. (Original) A system as in claim 5 wherein said navigation receiver determines said range and said position in response to said first signal and said second signal.

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8. (Original) A system as in claim 5 wherein said at least one non-geostationary satellite generates and transmits said first signal and said second signal on L-band frequencies.

9. (Original) A system as in claim 1 wherein said navigation receiver performs as an integrity-monitoring device.

10. (Original) A system as in claim 1 wherein said navigation receiver monitors a plurality of satellites and in response thereto determines accuracy of said position.

11. (Original) A system as in claim 1 wherein said at least one non-geostationary satellite generates said plurality of signals comprising integrity information that is related to health of the at least one non-geostationary satellite.

12. (Original) A system as in claim 11 wherein said at least one non-geostationary satellite generates said plurality of signals comprising integrity information that is indicative of accuracy of said range and said position.

13. (Original) A system as in claim 1 wherein said navigation receiver determines accuracy of said position in response to said integrity information.

14. (Original) A system as in claim 1 further comprising a control center generating an integrity signal, said at least one non-geostationary satellite determining said integrity information in response to said integrity signal.

15. (Original) A system as in claim 1 further comprising a control center generating a reliability signal, said receiver determining reliability of said position in response to said reliability signal.

16. (Original) A system as in claim 1 further comprising a control center generating a reliability signal, said receiver determining reliability of said range in response to said reliability signal.

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17. (Original) A system as in claim 1 further comprising a monitoring center monitoring said at least one non-geostationary satellite and generating a measured signal; and

a control center generating an integrity signal in response to said measured signal.

18. (Original) A system as in claim 17 wherein said control center generates a reliability signal in response to said measured signal.

19. (Original) A system as in claim 18 wherein said at least one non-geostationary satellite adjusts said integrity information in response to said reliability signal.

20. (Original) A system as in claim 1 further comprising a control center having a first ground antenna and a second ground antenna, said first ground antenna transmitting a data signal and said second ground antenna transmitting a reliability signal.

21. (Original) A system as in claim 1 further comprising:  
a plurality of monitoring stations generating measured signals in response to said plurality of signals; and

a central station in communication with said monitoring stations and generating integrity signals and reliability signals in response to said measured signals.

22. (Currently Amended) A navigation system comprising:  
at least one non-geostationary satellite generating a plurality of signals having integrity information that is received and is generated offboard said at least one satellite; and

a navigation receiver determining range of said at least one non-geostationary satellite, position of said at least one non-geostationary satellite, and reliability of at least one of said range and said position in response to said plurality of signals.

23. (Original) A system as in claim 22 wherein said navigation receiver determines accuracy of said position in response to said plurality of signals.

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24. (Currently Amended) A navigation receiver for a navigation system receiving a plurality of signals having integrity information, which is generated offboard said at least one satellite, from at least one non-geostationary satellite, said navigation receiver determining range of said at least one non-geostationary satellite, satellite position of said at least one non-geostationary satellite, and accuracy of at least one of said range and said position in response to said plurality of signals.

25. (Original) A receiver as in claim 24 wherein the navigation receiver performs as an integrity-monitoring device.

26. (Original) A receiver as in claim 24 wherein the navigation receiver determines accuracy of said satellite position in response to said integrity information.

27. (Original) A receiver as in claim 24 wherein the navigation receiver determines accuracy of said range in response to said integrity information.

28. (Original) A receiver as in claim 24 wherein the navigation receiver determines position of said receiver in response to said plurality of signals.

29. (Original) A receiver as in claim 24 wherein said navigation receiver receives said plurality of signals over a single frequency.

30. (Original) A receiver as in claim 24 wherein the navigation receiver determines reliability of said satellite position.

31. (Original) A receiver as in claim 24 wherein the navigation receiver determines reliability of said range.

32. (Original) A receiver as in claim 24 wherein the navigation receiver determines reliability of said range and said satellite position and in response to said reliability determines timing and velocity of a vehicle associated with the navigation receiver.

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33. (Currently Amended) A method of operating a navigation system comprising:

generating a plurality of signals having integrity information from at least one non-geostationary satellite, said integrity information is received by and is generated offboard said at least one satellite; and

determining range of said at least one non-geostationary satellite, position of said at least one non-geostationary satellite, and accuracy of at least one of said range and said position in response to said plurality of signals.

34. (Original) A method as in claim 30 wherein said plurality of signals are generated over a single frequency.

35. (Original) A method as in claim 30 further comprising determining reliability of said range.

36. (Original) A method as in claim 30 further comprising determining reliability of said position.

37. (New) A receiver as in claim 24 that is configured to perform as an integrity-monitoring device and to perform an internal self-consistency check in response to said plurality of signals.

38. (New) A receiver as in claim 37 that is configured to exclude information received from at least one of said at least one non-geostationary satellite in response to said self-consistency check.